

L Number	Hits	Search Text	DB	Time stamp
2	0	polyisobutylenesulfonate	USPAT; US-PGPUB; EPO; DERWENT	2004/08/02 09:37
1	6	polyisobutylene adj sulfonate	USPAT; US-PGPUB; EPO; DERWENT	2004/08/02 09:36
3	0	polyisobutylene adj sulfonate	USOCR	2004/08/02 09:36
4	0	polyisobutylenesulfonate	USOCR	2004/08/02 09:36
5	0	isobutylenesulfonate	USPAT; US-PGPUB; EPO; DERWENT	2004/08/02 09:37
6	1	isobutylene adj sulfonate	USPAT; US-PGPUB; EPO; DERWENT	2004/08/02 09:38
7	2	isobutylene adj sulfonate	USOCR	2004/08/02 09:38

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 SDIs in Caplus
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FILE COVERS 1907 - 2 Aug 2004 VOL 141 ISS 6

FILE LAST UPDATED: 1 Aug 2004 (20040801/ED)

This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> s polyisobutylene adj sulfonate

11094 POLYISOBUTYLENE

213 ADJ

53055 SULFONATE

L1 0 POLYISOBUTYLENE ADJ SULFONATE
(POLYISOBUTYLENE (W) ADJ (W) SULFONATE)

=> s polyisobutylene sulfonate

11094 POLYISOBUTYLENE

53055 SULFONATE

L2 5 POLYISOBUTYLENE SULFONATE
(POLYISOBUTYLENE (W) SULFONATE)

=> d 12 1-5

L2 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

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References

AN 2001:935728 CAPLUS

DN 136:72131

TI Surfactant blends containing polyisobutylene sulfonates for aqueous
surfactantflood petroleum recovery

IN Hou, Peter Wanggi; Feuerbacher, David G.

PA Crompton Corporation, USA

SO PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001098432	A2	20011227	WO 2001-US17571	20010531
	WO 2001098432	A3	20020711		
	W: CA, CN, ID				
PRAI	US 2000-595996	A	20000616		

L2 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

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References

AN 1994:9350 CAPLUS

DN 120:9350

TI Structure-property relationships in polyisobutene telechelic ionomers with
narrow or broad polydispersity

AU Loveday, Don; Wilkes, G. L.; Lee, Youngkwan; Storey, R. F.

CS Dep. Chem. Eng., Virginia Polytech. Inst. and State Univ., Blacksburg, VA,
24061, USA

SO Polymer Preprints (American Chemical Society, Division of Polymer
Chemistry) (1992), 33(2), 288-9

CODEN: ACPPAY; ISSN: 0032-3934

DT Journal

LA English

L2 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

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References

AN 1988:115643 CAPLUS

DN 108:115643

TI Coal-water slurry compositions

IN Shimakawa, Katsuhiko; Uchida, Tatsuo; Yoshikawa, Yasuhiro

PA Nikka Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62232496	A2	19871012	JP 1986-75502	19860403
	JP 05076996	B4	19931025		
PRAI	JP 1986-75502		19860403		

L2 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

Full Text Citing References

AN 1979:613691 CAPLUS
 DN 91:213691
 TI Thiophosphonate dispersant combination
 IN De Vries, Louis
 PA Chevron Research Co., USA
 SO U.S., 6 pp.
 CODEN: USXXAM
 DT Patent
 LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4159959	A	19790703	US 1978-920875	19780630
	CA 1121793	A1	19820413	CA 1979-324332	19790328
	GB 2025456	A	19800123	GB 1979-20915	19790615
	GB 2025456	B2	19821020		
	FR 2429834	A1	19800125	FR 1979-16061	19790622
	FR 2429834	B1	19840824		
	NL 7905011	A	19800103	NL 1979-5011	19790627
	DE 2926069	A1	19800110	DE 1979-2926069	19790628
	JP 55007895	A2	19800121	JP 1979-81589	19790629
PRAI	US 1978-920873		19780630		
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	US 1978-920875		19780630		
	US 1978-920876		19780630		

L2 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

Full Text Citing References

AN 1978:582219 CAPLUS
 DN 89:182219
 TI Superbasic sulfonates
 IN Bakker, N.
 PA Chevron Research Co., USA
 SO Belg., 27 pp.
 CODEN: BEXXAL
 DT Patent
 LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BE 861125	A1	19780316	BE 1977-182876	19771123
	US 4137184	A	19790130	US 1976-751422	19761216
	JP 53088088	A2	19780803	JP 1977-135597	19771111
	GB 1588246	A	19810423	GB 1977-48442	19771121
	ZA 7707289	A	19781025	ZA 1977-7289	19771206
	FR 2374407	A1	19780713	FR 1977-37217	19771209
	DE 2755225	A1	19780622	DE 1977-2755225	19771210
	NL 7714001	A	19780620	NL 1977-14001	19771216
PRAI	US 1976-751422		19761216		

=> d 12 1-5 abs

L2 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

Citing References

AB Aq. flooding fluids for alk. surfactantflood and waterflooding petroleum recovery (at pH >7) includes a surfactant blend contg. a synthetic **polyisobutylene sulfonate** surfactant and at least one secondary surfactant selected from other sulfonates, alcs., and nonionic surfactants, optionally in the presence of a water-sol. polymeric viscosifier or thickener. The alk. materials added to the aq. surfactant soln. include NaOH, Na₂CO₃, NaHCO₃, and Na₂SO₄. Such fluids are able to increase the petroleum recovery to >10% of the original oil in place.

L2 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

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References

AB The mol. wt. polydispersity of sulfonate-terminated triarm polyisobutylenes affects the long-range order as does the valence of the counter-cation. A decrease in the breaking strain and an increase in modulus are obsd. when the mol. wt. distribution (MWD) narrows. Continuous and periodic sheetlike morphol. are indicated for the narrow MWD ionomers in contrast to the more typical ion multiplets in small-angle x-ray scattering and cluster morphol. found in the broad MWD telechelic oligomers.

L2 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

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References

AB Dispersants for highly-concd. coal-water slurries, present at 0.1-1.0 wt.% concn., contain a sulfonate salt of polybutadiene or polyisobutylene derivs. (mol. wt. 1,000-200,000). Thus, a 70 wt.% coal-water slurry (78% particle diam. ≤200 mesh) was blended with 0.5 wt.% of a 1,4-butadiene polymer sulfonic acid Na salt (mol. wt. 3000), and the mixt. was then stabilized for 7 days and had a viscosity (at 30°) of 720 cP, vs. <5400 cP for a conventional dispersant (contg. sodium lignosulfonate).

L2 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

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References

AB The detergency of lubricating oils is improved by the addn. of an alk. earth metal C₂₀-100 aliph. sulfonate (10-30 mmol/kg) and a monohydroxyalkyl hydrocarbyl thiophosphonate (2-10 wt. %). Thus, 12,000 g polyisobutylene [9003-27-4] (mol. wt. 950) in 6000 g 1,2-dichloroethane was treated at 40°F with 2100 g ClSO₃H in 6000 g Bu₂O, and the mixt. was heated at ~100°F for ~5 h. The product was converted to the Na salt and then to the Ca salt by metathesis. Enough diluent oil was added to the sulfonate product to give a 70% conc., which after stripping and filtering contained Ca 1.31, S 1.97, Cl 0.07, and neutral Ca (as sulfonate) 1.10%. A lubricating oil compn. was prepd. that contained the sulfonate (10 mmol/kg) and other additives, including 1.5% TLA 202 [mono(hydroxyalkyl)polybutenylthiophosphonate] [72026-95-0]. The lubricating compn. was tested in the Caterpillar 1-G detergency test, and the results were comparable to those given by a com. Ca petroleum sulfonate under the same conditions.

L2 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

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References

AB The superbasic sulfonates suggested for use in lubricants to give them desirable detergent properties have the general formula RSO₃M, where R is an aliph. group contg. ≥50 C atoms and where M represents such metals as Ca, Na, Li, Mg, etc. Detailed descriptions of the prepn. of Ca, Na, and Li polyisobutylenesulfonate are given.

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